Shreya Banik

New Haven, CT | +1 (203) 676-7828

sbani1@unh.newhaven.edu | https://www.linkedin.com/in/banikshreya/ | https://github.com/kshreya2k

SUMMARY

- 2+ years of industry experience in Data Science, Full Stack Engineering and Web development.
- Proficient in applying Data Science techniques to build robust and flexible applications, ensuring effective problem-solving and innovation.

EDUCATION

University Of New Haven, Connecticut, USA **May, 2025**

Master of Science in Data Science **3.9/4 GPA**

- Data Science, Artificial Intelligence, Mathematics, Distributed and Scalable Data Engineering, Database Management System, Machine Learning, Deep Learning, Natural Language Processing

Hooghly Engineering and Technology College, India **Aug, 2023**

Bachelor of Technology in Electronics and Communication Engineering **3.7/4 GPA**

- C Programming, Data Structures, Object Oriented Programming, Analog and Digital Communication, Wireless Communication and Radar Engineering, Digital Signal Processing, Wireless Communication, Digital Logic Design

TECHNICAL SKILLS

Language: Python, R, JS, HTML5, CSS3, MATLAB, Typescript, C, C++

Frameworks: React Native, Node-JS, Express-JS, Keras, TensorFlow

Database: SQL, MYSQL, MONGODB, NoSQL

Tools: Git, Splunk, MySQL Server, Pytorch, Docker

Python Libraries: Numpy, Sumpy, Pandas, Scipy, Matplotlib, Seaborn

MS-Tools: Office, Word, Excel, Power BI

WORK EXPERIENCE

Programmer Analyst, Cognizant Technology Solution, India **Oct 2021 – May 2023**

- Conducted in-depth modeling of insurance data by utilizing Monthly Service Review (MSR) and analyzed Monthly Metrics, forecasted weekly and monthly demand for various claims and policies. Led to increase an impressive overall accuracy of 84%.
- Saved $15.8 Billion as part of the reconciliation process by manipulating data through MySQL Sever tool during query executions, demonstrating a strong commitment to cost efficiency.
- Achieved a 73% issue resolution rate through Hypercare on the same day, contributing to enhanced business outcomes.
- Identified and reduced defects by 8X times, showcasing effective problem-solving skills and process improvement.
- Implemented a reconciliation tool, reduced resource efforts by 98% and enabling seamless tracking of 400K+ daily transactions in ServiceNow, ensuring no financial loss through missed transactions.

Intern, CBNITS Pvt. Ltd., India **Apr, 2021 – Sep 2021**

- Teamed up with inter-departmental managers to resolve problems in the application by introducing innovative changes in the product.
- Developed a flexible and protected mobile application for Crypto-Currency using Angular framework and Typescript in React-Native environment.
- Conducted comprehensive end-to-end research to inform data-driven decision-making processes and enhance overall project outcomes.
- Introduced latest classes and methods in app-development to bring improved flexibility and functionality of the application by 82%.

PROJECTS

Uber Fare Prediction Cost Estimation using Machine Learning

- Developed and implemented a predictive model for Uber ride fares, leveraging diverse input features using Machine Learning.
- Addressed missing values, performed data transformations, and conducted feature selection to enhance dataset quality for modelling.
- Identified and managed outliers in critical features, making informed decisions on their removal or application of appropriate transformations.
- Trained the data model on a 1.6M parameter dataset and efficiently employed a Random Forest Regressor to split data for training/testing, scale numerical features.
- Optimized performance using metrics such as Mean Squared Error (MSE) and Root Mean Squared Error (RMSE) resulting in an 80% increase in training efficiency.

Statistical Analysis on Accidental Drug Deaths in Connecticut using Python

- Analyzed a dataset of 51.3K entries using Python and key libraries (Numpy, Matplotlib, SciPy, Pandas, Seaborn) to uncover crucial insights into the alarming increase in accidental drug-related deaths in Connecticut (2012-2022).
- Applied advanced statistical analysis to map and summarize evidence, providing a profound understanding of changing patterns in drug-related deaths, contributing to public health surveillance and breaking down complex dynamics through the incorporation of toxicology results.
- Established a foundation for effective interventions, empowering public health authorities with valuable insights to potentially achieve a 30% reduction in drug-related fatalities in the community through informed policy decisions.
- Created a dynamic and user-friendly website to disseminate and visualize the project's valuable insights on the rise of accidental drug-related deaths, utilizing HTML5, CSS3, JavaScript, and jQuery and enhanced public engagement by 40%.

Digital Portfolio

- Implemented a user-friendly interface that enhances the browsing experience, allowing visitors to easily navigate through my portfolio, view project details, and gain insights into my skills and accomplishments.
- Leveraged a combination of HTML for structuring, CSS for styling, and JavaScript for interactivity, showcasing proficiency in key web development technologies while ensuring a responsive and visual appeal.